

Notice of Allowability

Application No.

10/696,152

Examiner

Erica E. Cadugan

Applicant(s)

BROGHAMMER ET AL.

Art Unit

3722

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to after final amendment submitted 6/16/06 and interview of 7/13/06.
2. ☒ The allowed claim(s) is/are 1-6,8-12,14,19,21 and 23.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date <u>20060620</u> . |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

EXAMINER'S AMENDMENT

1. Firstly, Examiner notes that the proposed after-final amendment filed June 16, 2006 has been entered. An additional amendment appears below.

2. An extension of time under 37 CFR 1.136(a) is required in order to make an examiner's amendment which places this application in condition for allowance. During a telephone conversation conducted on July 13, 2006, Mr. Jay Durst requested an extension of time for 1 MONTH(S) and authorized the Director to charge Deposit Account No. 50-1170 the required fee of \$120.00 for this extension and authorized the following examiner's amendment. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

Claim 1 (Currently Amended). An adjustment device for adjusting the position of at least one cutter of a fine machining tool with respect to a cutter support, the cutter support having a longitudinal axis, the adjustment device comprising:

the cutter support bordering at least one enclosed pressure chamber which is arranged in an adjustment direction of the at least one cutter with a displacement with respect to the at least one cutter and which is filled with a pressure transfer means which can be placed under pressure with a pressure generation device, wherein

between the at least one cutter and the at least one pressure chamber a cutter support wall remains which [is] bulges elastically [deformable] upon application of pressure by the pressure transfer means to adjust the position.

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3. The following is an examiner's statement of reasons for allowance:

The Hyatt reference (U.S. Pat. No. 6,270,295) has been discussed in detail on the record in at least the final rejection mailed March 16, 2006, in the interview summary mailed June 14, 2006, and in the interview summary attached hereto. Suffice it to say, in the Hyatt reference it is noted that any elastic movement or deformation of anything that can be considered a "cutter support wall" that is caused by the application of "pressure by the pressure transfer means to adjust the position" of the at least one cutter as claimed is a bending or flexing movement of such cutter support wall. Hyatt does not teach that between the at least one cutter and the at least one pressure chamber a cutter support wall remains which "bulges elastically" upon application of pressure by the pressure transfer means to adjust the position as now set forth in independent claim 1, and thus, for at least this reasoning, Hyatt does not anticipate the present invention as set forth in independent claim 1.

A similar situation exists with the bending or flexing walls taught by U.S. Pat. No. 4,224,846 to Eysel et al., discussed in detail in the interview summary mailed June 14, 2006.

Additionally, it is noted that references such as DE 3721521 (hereinafter '521) and DE 4015149 (hereinafter '149) teach devices that utilize pressurized elastically bulging walls to grip a cutting tool shank in a tool holder (note the annular chamber 6 of '521 whose walls "bulge" to grip the cutter as per at least the abstract and Figures 1-5 and the thin walls 8 of '149 that "bulge" to grip the cutter, see at least Figure 1 and the abstract). However, it is noted that neither DE '521 nor DE '149 teach the present invention as set forth in the independent claim 1, because the pressurized bulging walls '521 are flexed or bulged radially inwardly towards the tool bit all the way around the tool bit to thereby fixedly clamp the tool bit in the center of the bulging wall(s).

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The bulging walls do not “adjust the position” (of the cutter, noting that the only “position” previously referred to in the claim, prior to the limitation “the position” in the last line, is the “position of at least one cutter of a fine machining tool with respect to a cutter support”) as set forth in claim 1, and particularly the cutter position is not adjusted with respect to any sort of “adjustment direction of the at least one cutter” in which direction the chamber is spaced, noting that the deforming wall produces a radially-inwardly directed force all the way around the tool to thereby clamp or fix the tool position (not “adjust” it).

Additionally, there is no combinable teaching in the prior art of record that would reasonably motivate one having ordinary skill in the art to modify the teachings of either of Hyatt or Eysel to utilize elastically bulging cutter support walls to adjust the cutter position, nor to modify the teachings of either of DE ‘521 or DE ‘149 to utilize their bulging walls to adjust the position of the cutter rather than to fixedly clamp the cutter, and thus, for at least the foregoing reasoning, none of these references, nor any other prior art of record, renders obvious the present invention as set forth in independent claim 1.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. In particular, note that in U.S. Pat. No. 5,427,480 to Stephens, the position of cutter element 22 is “adjusted” via a flexing or bending of the resilient arm structure 69 (see Figure 1,

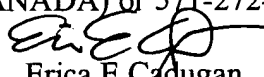
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for example), and that in U.S. Pat. No. 6,243,962 to Brock, the position of the cutter 28 (shown but not labeled in the upper right hand corner of each of Figures 3A and 3B) is "adjusted" via a flexing or bending of the walls as shown in Figures 3A and 3B, noting that Figure 3A shows the cutter in its initial position, and Figure 3B shows the cutter in its adjusted position with the walls flexed or bent.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Erica E. Cadugan whose telephone number is (571) 272-4474. The examiner can normally be reached on M-F, 6:30 a.m. to 4:00 p.m., alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Monica S. Carter can be reached on (571) 272-4475. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Erica E Cadugan
Primary Examiner
Art Unit 3722

eec
July 13, 2006